

CLAIMS

1. Continuous casting mold for liquid metals, especially liquid steel, with steel charging plates, which are arranged parallel opposite each other to form the casting cross section and are surrounded by water tanks; with cassette-type copper plates, which rest against the steel charging plates and bound the casting cavity; possibly with end plates, which are inserted at the end faces of the casting cavity for establishing the thickness and/or width of the cast strand and close the casting cavity at the end faces; and with coolant channels that connect an inlet with an outlet in the copper plates at their contact surfaces with the steel charging plates; characterized by the fact that the thickness (10) of the copper plates (3) between the coolant (11) and the hot side (3a) of the copper plates (3) varies over the width ($2 \times L$) and/or over the height (12) of the mold.

2. Continuous casting mold in accordance with Claim 1, characterized by the fact that the coolant channels (9) run in the copper plate (3) and at least partially in the adjacent steel charging plate (2).

3. Continuous casting mold in accordance with Claim 1 or Claim 2, characterized by the fact that the cross section (14) of the coolant channel (9) is smaller in the meniscus region (13) than elsewhere in the coolant channel (9).

4. Continuous casting mold in accordance with Claim 1 or Claim 2, characterized by the fact that the thickness (10) between the coolant channel (9) and the hot-side surface (3a) of the copper plate (3) is smaller in the meniscus region (13) than it is above or below this region.

5. Continuous casting mold in accordance with Claim 3 or Claim 4, characterized by the fact that the smaller thickness (10) between the coolant channel (9) and the hot-side surface (3a) of the copper plate (3) is limited to the height section (H2), and the thickness increases continuously to a distance (A_u) in lower sections.

6. Continuous casting mold in accordance with any of Claims 1 to 5, characterized by the fact that a distance (D1; D3) of the hot-side surface (3a) of the copper plate (3) is constant in the same height sections (L1; L3).

7. Continuous casting mold in accordance with any of Claims 1 to 6, characterized by the fact that in width section (L2), the distance to the hot-side surface (3a) is smaller in the central region than in the peripheral region.

8. Continuous casting mold in accordance with any of Claims 1 to 7, characterized by the fact that grooves (15) in the copper plate (3) which communicate with the coolant channel (9) are formed with groove depths (16) greater than 10 mm and less than 20 mm.

9. Continuous casting mold in accordance with any of Claims 1 to 8, characterized by the fact that a funnel mold (17) can be used and that the width section (L3) with the greatest distance (D3) of the coolant channel (9) from the hot-side surface (3a) of the copper plate (3) has a length of 50-80% of the width region (L) in the funnel (17a).

10. Continuous casting mold in accordance with Claim 9, characterized by the fact that an external width region (L1) of the copper plate (3) is 50-80% of the wide-side half-length (L) minus the funnel half-width (L3).